IN THE SPECIFICATION:

Page 1, line 3, insert: --This application is a continuation-in-part of PCT/FR00/02061 filed July 18, 2000.--

Page 6, line 27-page 7, line 13:

A wetting agent may be added to the nickel coat or to the clad alloy layer, or both, in order to improve the wettability of the clad alloy during the brazing process. Said wetting agent is typically an element selected from the group consisting of lead, bismuth, lithium, antimony, tin, silver, thallium and any mixture thereof. When the wetting agent is added to the clad alloy layer the latter typically comprises between 0.01 and 1 wt. % of wetting agent. The wetting agent may be added to the nickel coat by electrolytically depositing both the nickel and the wetting agent. For that purpose the wetting agent may be introduced in the nickel-plating bath, typically as a compound of the wetting agent, such as acetates, citrates, sulfamates, fluoborates, lactates, oxides or mixtures thereof. For example, the following compounds may be used : lead acetate, lead citrate, lead sulfamate, lead ~~fluborate~~ fluoborate, bismuth lactate or bismuth oxide. The amount of wetting agent compound in the plating bath is typically between 0.1 and 10 g/l.

Page 9, lines 7-27:

The continuous nickel plating device of at least one aluminum conductor (or "treatment line") according to the invention comprises a nickel plating tank (30) comprising a receptacle (2) that can contain a nickel plating bath (4) and at least one electrode (3) containing nickel, called the anode, at least one electrical power supply (5) to apply an electrical voltage (V_1) between the anode and the said conductor, and means (21, 22) for making the conductor or each conductor (1) move ~~forwards~~ forward in the nickel plating bath

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(4) and is characterized in that it also comprises at least one pre-treatment tank (40, 41, 42) comprising a receptacle (17, 43, 46) that can contain a pre-treatment bath (16, 44, 47), and means of moving the conductor or each conductor forwards in the pre-treatment bath (16, 44, 47), and in that it comprises mechanical contact means (7~~, 13, 14~~) of applying the said electrical voltage to the part (6) of the, or each, said conductor (1) output from the pre-treatment step P. Typically, the conductor unwound in the untreated state (10) from at least one turning gear (22) passes through the treatment baths (40, 41, 42, 30) in sequence, and is then wound onto at least one second turning gear (21) in the nickel plated state (11).

Page 10, lines 1-16:

The pre-treatment step P is preferably done electrolytically, which enables easier control over pre-treatment as a function of operating conditions of the treatment line. In this case, the pre-treatment tank (40) is provided with at least one electrode (15) and the device comprises an electrical power supply (8) intended for pre-treatment. The electrical voltage V_2 output by this power supply may be AC, DC or pulsed, or a combination thereof. The current connection on the conductor is made by a mechanical contact placed downstream from the pre-treatment tank (40). This mechanical current connection is advantageously the same as the connection used in the nickel plating step, as illustrated in Figure 1, which simplifies the device without overloading the mechanical contact means (7, ~~13, 14~~) since the intensity of the pre-treatment current (I_2) is usually significantly less than the intensity of the nickel plating current (I_1).

Page 10, line 28-page 11, line 6:

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According to a second variant of the invention, apart from an activation step A particularly to dissolve oxides present on the surface of the conductor (1), the pre-treatment step P comprises a pre-nickel plating step PN in which the aluminum conductor (1) is coated with a "primary" nickel deposit. The nickel plating current (I_1) is then transmitted to the said conductor through mechanical contact means (7~~, 13, 14~~) on the part (6) of the conductor (1) coated with the said primary nickel deposit.

Page 12, lines 5-13:

Figure 2 illustrates a device for implementing this variant of the invention. This device comprises an electrolytic activation tank (42) and an electrolytic pre-nickel plating tank (41), preferably close to each other and possibly adjacent to each other, a first electrical power supply (8) common to these two tanks, an electrolytic nickel plating tank (30), a second electrical power supply (5) and mechanical contact means (7, ~~13, 14~~) on the part (6) of the conductor (1) located between the pre-nickel plating tank (41) and the nickel plating tank (30).

Page 12, lines 23-30:

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Page 13, line 19-page 14, line 2:

In this variant, the first electrical power supply (8) is

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DC, possibly modulated or pulsed, the positive terminal being connected to the conductor (1) through the mechanical contact (7) and the negative terminal being connected to at least one electrode (15) immersed entirely or partly in the said activation/pre-nickel plating bath (16). The second electrical power supply (5) is a DC current, possibly modulated or pulsed; the positive terminal is connected to an electrode (3) containing nickel, wholly or partly immersed in the nickel plating bath (4) and the negative terminal is connected to the part (6) of the conductor (1) located between the activation/pre-nickel plating tank (40) and the nickel plating tank (30) by mechanical contact means (7, ~~13, 14~~), preferably common with those in the first power supply (8).

Page 14, line 26-page 15, line 12:

The mechanical rolling contact means ~~(70)~~ illustrated in Figure 3, that shows a preferred embodiment of the invention, comprises one or several wheels (71) rotating around an axle (73), the central axis (75) of the axle being approximately perpendicular to the said wheels (71). The wheel (71), or each wheel, is preferably provided with a groove (74) inside which the ~~conductor~~ part (6) fits under pressure, which in particular prevents variations in the position of the conductor. The electrical current passes from the axle (73) to the ~~conductor~~ part (6) through the wheel (71). The axle-wheel(s) assembly (70) may be immersed in a liquid (14). The contact means ~~(70)~~ may comprise a ring (72), typically made of graphite, to make it easier for the wheels (71) to rotate about the axle (73) and improve the electrical contact. This variant also avoids the use of a ball bearing. In tests carried out by the applicant, the wheels used (71) were made of copper (possibly nickel plated) and the axle (73) was made of stainless steel.

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Page 15, lines 13-25:

The mechanical contact means illustrated in Figure 4, that also shows a preferred embodiment of the invention, comprises a set of at least three wheels (701, 702, 703) that work together to give a satisfactory electrical contact on the conductor (6), or each conductor. Preferably, each conductor comprises this type of means when several conductors are treated simultaneously. At least one of the said mechanical contact means (7~~, 13, 14~~) comprises this type of contact. Each wheel rotates around its own axis (731, 732, 733) and applies a force (F1, F2, F3) on the conductor. In practice, it is sufficient to adjust the force exerted on the conductor, by moving the central wheel (702) alone. The three wheels can be immersed in a liquid (14).

Page 16, lines 14-29:

According to another variant of the invention, several conductors are treated simultaneously, particularly in pre-treatment and nickel plating baths. For example, two or more conductors can be placed in parallel for this purpose, the said conductors can pass simultaneously from one tank to the next using separate means of advancing each conductor, or common means for all conductors. In other words, the device includes means of making two or several conductors move ~~forwards~~ forward simultaneously in at least one of the said treatment tanks. For example, layers of conductors originating from a series of distinct turning gears circulate in parallel in the said baths, and after treatment are wound onto a series of separate turning gears. The contact means (7, ~~13, 14~~) on the part (6) of the conductors ~~(6)~~ output from the pre-treatment step may be wholly or partly common to the conductors; for example, the said means may comprise a strip of carbonated material that can be put into contact with all conductors in a layer.

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